

**Urban Forestry Commission**  
**July 23, 2015**  
**Meeting Summary**

**Attendance**

Dean Amel  
Nora Palmatier  
Caroline Haynes  
Paul Campanella  
Mikaila Milton  
Steve Campbell  
Per Midboe  
Alex Sanders

**State and County Staff**

Jamie Bartalon, DPR  
Rachel Jackson, DPR  
Vincent Verweij, DPR

**Public Comment** – There was no public comment.

**Tree Pits and Stormwater Management – Continued Discussion**

UFC members Dean Amel, Karen Kumm Morris and Steve Campbell met with staff members Vincent Verweij (DPR), Rachel Jackson (DPR) and Brett Wallace (CPHD) on July 21, to discuss options for tree pit designs that function as stormwater management facilities. DPR staff also discussed the topic earlier with DES staff. Tree health and stormwater management benefits provided by expanded soil volume in tree pits was a topic of conversation in both meetings. However, Mr. Verweij noted that the Virginia Department of Environmental Quality (DEQ) does not currently give stormwater management credit for expanded soil volume in tree pits.

Dean Amel noted that stormwater management facilities currently being installed by DES in medians and street right-of-ways to meet stormwater management permit requirements do not contain trees because of staff concerns that soil media will need to be periodically replaced in order to function properly. Recent designs using “sunken” tree pits with stormwater inlets qualify for stormwater management credits, but there are concerns that tree health will be impacted by saturated (potentially anaerobic) soils, especially if the proper planting media is not specified or correctly installed. Commission members have also raised concerns about potential pedestrian safety hazards associated with sunken tree pits, and the tendency for trash to collect in the pits.

Mr. Amel also reported that UFC member Karen Kumm Morris has discussed other design options for incorporating tree pits in stormwater management facilities, such as collecting stormwater in an underground storage facility covered by a grate. Stormwater can then be gradually directed into tree pits through pipes, rather than directly channeled at high volumes through an inlet. An issue is that builders want to get stormwater management credits (to meet

DEQ requirements) in the most economic manner, but designs that incorporate trees and an appropriate soil mix generally don't provide as much credit as other options.

Caroline Haynes suggested checking with the Virginia Department of Forestry to see if they would assist with efforts to have Virginia DEQ consider granting more stormwater management credits for trees. Vincent Verweij reported that staff is also exploring design options that provide maximum tree health and stormwater management benefits.

Dean Amel will suggest a meeting with DES staff to further discuss design options and the use of trees in stormwater management facilities. The meeting will likely take place in September or October. Commission members are welcome to attend, but it will not be part of a regular UFC meeting. Caroline Haynes noted that Jason Papacosma (DES) discussed the issue at a NRJAG meeting several months ago. She also suggested following up with Jim McGlone to see if VDOF would assist with exploring stormwater management credits for trees with DEQ.

### **Soil and Trees Over Structures**

The issue of providing adequate soil volume to support trees over structures (such as underground garages) has been raised by Steve Campbell at Western Rosslyn Area Planning Study (WRAPS) and County Board meetings. Mr. Campbell reported that the Planning Commission recommended that staff perform an analysis of soil volume and structural requirements to support soil and trees, but CPHD staff recommend that the developer for the WRAPS area (Penzance) should perform the analysis. Dean Amel commented that he agrees it is appropriate for the developer to conduct the analysis, and noted that the issue also needs to be addressed in the Courthouse Square planning process.

Paul Campanella reported that he is aware of a federal building renovation project where GSA wrote contract specifications to allow for 2 ½ feet of soil to be added to the roof of an existing building. He noted that the primary concern of engineers was to prevent roots from intruding into the structure, not the added weight of soil. Vincent Verweij commented that a heavy waterproof liner placed between the surface of the roof and the soil may address the concern.

### **UFC Input on Courthouse Square Sector Plan Addendum and Other Planning Issues**

The commission discussed submitting a letter to the County Board in support of the current Draft Courthouse Square Sector Plan Addendum. A motion was made, seconded and approved to submit a letter of support, referencing the October, 2014 UFC comment letter, stressing the need to include adequate soil volume over the underground parking structure where trees are to be planted, and recommending that an impermeable barrier be installed on top of the parking structure to prevent tree roots from compromising its integrity. Dean Amel will circulate a draft letter for commission member review.

## **Approval of Minutes**

Minutes from the June 25, 2015 UFC meeting were approved.

## **Staff Reports**

- Jamie Bartalon informed the commission that an additional \$19,200 for the Tree Canopy Fund was recently received from the developer of “The Gables” Site Plan project to account for required tree plantings that could not be accommodated on site for a portion of the project. Additional contributions are expected from the developer for other portions of the project where not all required tree planting can be accommodated on site.
- Jamie Bartalon reported that Parks and Natural Resources (PNR) Division staff are working with NOVA Parks to establish an invasive plant control partnership along the W&OD trail. Several locations along the trail have been identified by PNR and NOVA Parks staff as priority areas for treatment. NOVA Parks staff will be briefing “The Friends of the W&OD” about participating in the partnership and allocating some funding for invasive plant control efforts on NOVA Parks property.
- Rachel Jackson provided the following updates:
  - PNR staff removed overgrown tree grates from 18 trees along Washington Boulevard between Kirkwood Road and North Lincoln Street.
  - A Neighborhood Conservation project for improvements to Chestnut Hills Park includes a recommendation to widen the sidewalk along North Harrison Street adjacent to the park, and a recommendation to replace the fence between the sidewalk and playground. Ms. Jackson has advised against expanding the sidewalk to install concrete near mature park trees. She also advised the project manager to require a tree spade to be used during fence installation in order to minimize tree impacts.
  - Design work is about to begin on a Neighborhood Conservation project for playground improvements at Woodlawn Park. The project will also include improvements to trails within the park. Although some selective removal of trees near the playground will be necessary, Ms. Jackson will work with the designer to try to preserve healthy, non-invasive trees. Dean Amel remarked that, if tree loss associated with the project is limited and mainly confined to unhealthy and/or invasive trees, the UFC may not need to be involved in review or discussions of the plan. However, if there is the potential for significant tree impacts, the UFC may request a presentation by staff. Ms. Jackson agreed to report back to the commission as the design progresses to see if a presentation is warranted. Per Midboe noted that trees are not located too close to the current playground, which doesn’t receive much shade.
  - Playground construction near 6<sup>th</sup> Street South at Long Bridge Park will begin soon. The playground will include a fog machine. Service berry trees near the playground area will be protected.
  - Tree protection fencing at Woodstock Park will be removed soon, as the project is nearing completion.

- Improvements at Virginia Highlands Park are progressing a bit behind schedule, but good tree protection measures have been implemented.
- Vincent Verweij provided the following updates:
  - The list of recommended trees on the County website has been updated.
  - A design for tree pits to capture stormwater is included in the Ballston Multi-Modal Project near the Metro entrance. Rather than using “sunken” tree pits to capture stormwater (as on other recent projects), the design for this project includes an underground stormwater management facility that supplies water to adjacent tree planting areas.
  - Approximately 30 ash trees at Fort Ethan Allen Park have died from Emerald Ash Borer infestations. The trees range in size from small to approximately 19 inches DBH. The area will be reforested using young/small trees so that the earthworks at the historic fort will not be disrupted during planting.
  - Tree protection has been erected at McKinley Elementary School in preparation for construction. Several large ginkgo trees from the McKinley school site will be transplanted to APS property at Jefferson Middle School.
  - Plans for renovations at Abingdon Elementary School include a five-year invasive plant control plan.

### **Commission Member Reports**

**Natural Resources Joint Advisory Group (NRJAG)** – Caroline Haynes reported that NRJAG members visited Glencarlyn Park, which is in the process of being included in the Old Growth Network.

**Park and Recreation Commission** – The Park and Recreation Commission meets next week. Caroline Haynes reported that she and Steve Campbell attended recent Western Rosslyn Area Planning Study (WRAPS) and Realize Rosslyn meetings. She also noted that Arlington County is close to awarding a contract for updating the Public Spaces Master Plan.

**Planning Activities** – Karen Kumm Morris informed the commission via e-mail that the updated Rosslyn Sector Plan calls for new development to provide soil volumes between 600 - 1,000 cf. per street tree and use alternative techniques such as structural cells and continuous soil panels.

Scott Brinitzer provided a written report (attached) on planning activities associated with planned development at South George Mason Drive and Columbia Pike (the Food Star site).

**Public Facilities Review Committee (PFRC)** – Steve Campbell’s PFRC update on Wilson School is attached.

**Western Rosslyn Area Planning Study (WRAPS)** – Steve Campbell’s update on WRAPS and his July 21, 2015 comments to the County Board are attached.

**Environment and Energy Conservation Commission (E2C2)** – Alex Sanders reported that E2C2 meets next Monday (July 27). They are also adding an August meeting. E2C2 will be represented on the Williamsburg Elementary School Task Force. They are also in the process of determining whether they will participate in planning for the Fire Station #8 project.

**Community Facilities Study** – Nora Palmatier’s Community Facilities Study report is attached.

**Tree Stewards** – Nora Palmatier’s Tree Stewards report is attached.

**Tree Canopy Fund** – Nora Palmatier’s Tree Canopy Fund report is attached.

**Northern Virginia Urban Forestry Roundtable** – Nora Palmatier’s Northern Virginia Urban Forestry Roundtable report is attached.

**Neighborhood Conservation Advisory Committee (NCAC)** – No report.

**Public Spaces Master Plan** – No report.

**Virginia Department of Forestry** – No report.

**Arlington Public Schools (APS)** – Jim Meikle (APS) was not able to attend the UFC meeting, but requested via e-mail that the commission consider submitting a letter supporting an option for the Stratford School renovation project that would place a three-story addition to the southwest of the existing building.

The commission discussed Mr. Meikle’s request, but members felt they did not have enough information on the various options and impacts to make an informed recommendation at the current time. Members agreed that they would like to have an opportunity to review and further discuss options before commenting.

Caroline Haynes noted that the Park and Recreation Commission’s representative on PFRC reported concerns over a proposed access road, which (depending on its location) could result in significant tree impacts. Vincent Verweij diagrammed the site to illustrate complex access issues, topography, and the presence of an RPA.

UFC Chair, Dean Amel, will inform Mr. Meikle that the UFC does not have enough information on project details to make a recommendation at this time. The commission would appreciate a

briefing on the project and proposed options at the next UFC meeting (September 24) if the deadline for comments is after that time.

**Virginia Cooperative Extension (VCE)** – Kirsten Buhl’s VCE report is attached.

### **New Business**

- Nora Palmatier reported that VDOF has \$10,000 available for media outreach on the benefits of trees.
- Caroline Haynes reported that she presented the Park and Recreation Commission’s white paper on the benefits of parks and open space to the County Board on July 21. She will send UFC members a link to the white paper.
- Ms. Haynes also reported that Tim McIntosh (CPHD/Neighborhood Conservation) will brief the Park and Recreation Commission on the Neighborhood Conservation Program process at their July 28 meeting.
- Dean Amel reminded UFC members that the commission will not meet in August. The next UFC meeting will be held on September 24, 2015.

## Attachments to July 23, 2015 Urban Forestry Commission Meeting Summary:

### Planning Activities – Scott Brintzer

An update on the Food Star development at George Mason and Columbia Pike:

#### OVERVIEW:

- I attended the second planning meeting as representative of UFC
- The project is being pushed forward in accordance with the Columbia Pike Form Based Code process.
- Entire site will be redeveloped into apartment homes or condo's with a 24hour grocery store, restaurants on the first floor, structured parking.
- There is a 27' grade change on site. This presents the greatest challenge for the design team.
- The intersection of the two roads is awkward, not meeting at a 90 degree angle.
- Applicant has included a "park" the size of a tennis court near the intersection.
- Landscape architect solution, or design for the site, is to elevate the park above the intersection, allowing for more soil volume above garage. Exact height above Columbia Pike still not determined; part of park will be above the intersection, part at grade with Columbia Pike as Pike rises as it passes development site.
- Developer's goal is to have restaurant seating spill outside, with a large seating area surrounding green space. He considers the outside dining, away from the intersection, with the park between restaurants and intersection vital to the success of his project.
- *Community and advisory committee* wants park to be as green as possible with less of a 'program' than other Arlington parks. This means that they don't want a water park, soccer field, something dedicated to a specific activity.
- Presently the plan calls for community input (on July 30) to get feedback on what the tennis court sized green area should look like. Committee decided that a single use, such as lawn, or natural habitat, or some such use would be best rather than have a multitude of uses for such a small area.
- Developer WANTS to have as many trees as possible along George Mason Drive, Columbia Pike, and up at the restaurant 'terrace' to create a soothing green environment.
- Developer and LA indicated using larger trees and 'Silva Cell' technology to have an immediate tree impact. Trees need to be limbed up so that restaurants are visible from streets, otherwise they will go out of business, (no visibility from street), and entire project 'fails'.
- The plan is very simple, not very developed, and vague at the moment. My responsibility as a member of UFC is to make sure that there are as many trees on site as possible. I can also present my opinion, I imagine, as to how trees should be sited to best insure that they survive, and to follow the plans for root zone growth etc. to make sure that there is enough soil volume for the trees.

If you wish to participate in the Public Open House, it's Thursday evening, July 30<sup>th</sup>, at the Trade Center off Four Mile Run. I'll update Committee as this project moves forward.

## **Public Facilities Review Committee – Steve Campbell**

**Wilson School site:** I had not previously mentioned that all the existing trees on the site will be removed. The soil over the entire site will be excavated to make way for construction (as for the entire WRAPS site).

July 15th meeting- Refinements of the selected school building design concept, 'fanning-bars', were presented. Transportation and parking for the school were also analyzed. Slide presentations can be seen at: <http://apsva.us/site/Page/29273> I recommend your taking a look at the architect's slides- great design! Part 1 is slides #1-82, part 2 follows.

Potential for trees: Not great, as much of the APS site will be taken up with the footprint of the school building and the synthetic turf playing field. However there will be trees in two small plazas between the school and sidewalk along Wilson Blvd, and along the pedestrian walk that will connect Wilson Blvd with the County park. There will be expansive rooftop terraces- the slides show some trees will be planted there too.

Questionable is the prospect for trees along approx. 300 feet of the 18th Street sidewalk adjacent to the school playing field (the school bus dropoff/pickup curb area). The presentation shows two options for the 18th St. street cross-section, one with trees and one without. In its cross-section the WRAPS Plan indicates trees are to be planted there. APS's alternative to trees there would be a 'green wall', which would be vines growing on the field's perimeter fencing. To look at the APS street cross-sections go to Part 2/slides 24-26), and for a schematic of the 'green wall' go to Part 1/slide 48.

Opportunities for tree planting must be maximized due to the overall lack of trees in the WRAPS area.

## **Western Rosslyn Area Planning Study (WRAPS) – Steve Campbell**

The County Board approved the WRAPS Plan earlier this week, after a two-year process. There will be a public planning process to design a new Rosslyn Highlands Park that will begin in a couple of months.

The Plan calls for a design study, undertaken by the developer Penzance, on how to build underground structures (parking garages) to support the weight of mature trees and their required 3-5 feet of soil depth (page 31 of the Plan). There is also language specifying that street trees and trees in parks have 600-1,000 cubic feet of soil volume per tree, where feasible, through the use of structural cells and continuous soil panels (page 34).

In coming years there will be site plans to review for the APAH affordable housing property, and for the Penzance residential and office buildings. The APS Wilson School site is mid-way through the design phase (see report below).

The look at the almost-final WRAPS Plan (7-21-2015 version) you can find it at:

[http://arlington.granicus.com/MetaViewer.php?view\\_id=2&event\\_id=784&meta\\_id=132797](http://arlington.granicus.com/MetaViewer.php?view_id=2&event_id=784&meta_id=132797)

Wilson School site (part of WRAPS study area): APS is in the process of designing a new Wilson School for the site. The PFRC and BLPC committees have been set up to oversee and assist in the process. I have submitted a report as UFC rep on the PFRC committee (see above).



My final WRAPS Plan UFC comments to the County Board are listed below:

**WRAPS- ADOPTION APPROVAL/COUNTY BOARD/UFC PRESENTATION/ 7-21-2015**

Good evening! I am here representing the Urban Forestry Commission. We commend the WRAPS Working Group, County staff, citizens and the respective property owners for their efforts to come up with a compromise plan- considering the many competing interests for very limited space. Those of us on the Urban Forestry Commission are disappointed in the outcome while appreciating the complexities involved.

UFC disappointment mostly stems from the fact that the hoped-for goal of 25% overall tree canopy for the WRAPS area is probably unattainable. Only fifteen percent, perhaps twenty percent, will be achieved, whereas existing canopy cover has been estimated to be 28%.

Much of the future tree canopy in the area may result from street trees. Large building footprints and the synthetic playing field will take up much of the space. And street tree canopy itself will be limited by curb cuts, drop-off areas, curbside school bus loading, and a travel lane right next to the curb on one side of the 'new' street, all resulting in either trees not planted, or requiring the planting of narrower-growing trees.

Canopy trees on the site of the County park will be essential to combatting the 'heat-island' effect there, as the park will be bordered by large buildings and a synthetic playing field. Large shade trees will provide park users and passersby with a place of respite and relative comfort. These trees will be planted over underground parking structures. UFC supports the Planning Commission's recommendation for a study assessing the feasibility and cost of designing the parking structures to handle the weight of both mature canopy trees and the necessary depth of soil. We do not see this will be an obstacle. Not mentioned in the Plan is the quality of the soil itself. This should be mentioned along with soil depth - good soil quality is equally important toward maximizing tree canopy potential and sustainability.

Last week the Planning Commission recommended in its letter to the County Board that language be added to the WRAPS plan to specify "600 to 1000 cubic feet of soil volume per planted tree, where feasible," just as in the Rosslyn Sector Plan. UFC supports inclusion of this language. Good planting conditions for trees is essential- so that they grow well and provide more canopy, which would help offset the reduced number of trees being planted.

The overall contribution of trees to environmental quality in the WRAPS area may be less than we hoped for, but if each property owner maximizes opportunities to plant trees on their own parcel, and even considers planting trees on their roofs as well, such actions could still get us to the 25% canopy-cover goal!

Thank you, County Board members, for your time and attention, and for your and County staff's dedicated service to the citizens of Arlington!

**Community Facilities Study – Nora Palmatier**

Commission members will provide outreach at the County Fair and are developing a Civic Engagement Toolkit with models on how to reach the different niches of Arlington's population. Very interesting material coming out. Much discussion on how specific 6 guiding principles for siting should be – as of now, particulars on considering open space, transportation, etc. are to be

considered for each siting process and not in the 6 global principles, but in the narrative report. Global principles are things such as: Balance County-wide and local needs and distribute facilities equitably across the County (which would include parks, open space). The relationships among all the numerous master plans and CIP is problematic for many commission members (and staff) - plus the reality that all final decisions are made by elected County or School Board members. Sept. 29 set for presenting report to CB & SB. Meeting materials at [study documents page](#).

### **Tree Stewards – Nora Palmatier**

TreeStewards held their annual meeting and I am no longer the president; Board members are alternating president responsibilities. It's a transition year. Lot's planned on the schedule for next year already so it will all work out.

### **Tree Canopy Fund – Nora Palmatier**

ACE is getting the applications organized and will get out to us soon. The review meeting is August 13, Thursday, 6:30 PM at Parks. ACE will notify applicants of Arlington's **Tree Distribution** also. Patrick Wegeng has set Saturday, Oct. 25 for the education and tree distribution day. He's checking on species available.

### **Northern Virginia Urban Forestry Roundtable – Nora Palmatier**

Sept. 11, Friday is Root Appreciation Day – a field work day at Prince William examining exposed tree roots. Announcement coming soon with limited spots available so register when it arrives. Soils Conference to be held Nov. 5 at Algonquin Regional Park – flyer coming next month.

### **Virginia Cooperative Extension – Kirsten Buhls**

Master Gardener Volunteer Training to start up on September 8 - November 17. Few spaces still available. Applications available on the [www.mgnv.org](http://www.mgnv.org) website

ISA Arborist certification training to be offered by the Mid Atlantic Chapter of ISA in August at Merrifield Garden Center on August 17-18,19 and testing will be offered on 8/20 For more information contact Nancy Herwig, Executive Director, MAC-ISA [exdirector@macisa.org](mailto:exdirector@macisa.org) phone: [703-753-0499](tel:703-753-0499) fax: [703-894-4994](tel:703-894-4994) [www.mac-isa.org](http://www.mac-isa.org) I will be attending on 8/17 and 8/18 if anyone from Arlington wants to carpool

About 20 volunteers from Tree Stewards and Master Gardeners attended this week's Brown Bag Lunch Lecture on Common and Emerging Tree Diseases and Insect Pests. A copy of the presentation is available.

Urban Agriculture Month in October will kick off with a day long seminar of how to classes, outside speakers, and lunch to registrants. Tree related programming will be included with presentations on The Edible Forest, and Edible Landscaping that will feature crops that can be grown under the shade of canopy trees.